REMARKS

Claims 1-41 are pending in the present application.

In the Office Action, claims 12-13 were rejected under 35 U.S.C. § 112, second paragraph, as allegedly being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicant regards as the invention. Claims 12-13 have been amended to remove the term "modem" solely to render these claims definite. The claims have in no way been narrowed by virtue of these amendments and so these amendments should not be interpreted as narrowing the claimed invention for purposes of any determination under the doctrine of equivalents. Applicant respectfully requests that the Examiner's rejections of claims 12-13 under 35 U.S.C. § 112, second paragraph, be withdrawn.

In the Office Action, claims 1-2, 5-11, and 14-15 were rejected under 35 U.S.C. § 102(b) as allegedly being anticipated by Beckert, et al (U.S. Patent No. 5,794,164). Claims 3-4 and 12-13 were rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Beckert in view of Moore (U.S. Patent No. 5,343,527). The Examiner's rejections are respectfully traversed.

Independent claim 1 sets forth a computer system that includes a peripheral device and a processing unit adapted to execute a driver for interfacing with the peripheral device in a standard mode of operation and an authentication agent in a privileged mode of operation. The authentication agent includes program instructions adapted to authenticate the driver. Claims 2-15 depend from claim 1.

Beckert describes a computer module 64 that may include a smart card reader 42 that accepts smart cards. The smart cards can be programmed to include encrypted driver identification information that a security system may use to authenticate the driver (e.g., a person, such as an owner of the vehicle) of the vehicle. See Beckert, col. 9, ll. 36-54. However,

Beckert does not describe or suggest a processing unit adapted to execute a driver, in the sense that the term "driver" is used in the present application. In particular, Beckert fails to describe or suggest a driver for interfacing with the peripheral device in a standard mode of operation and an authentication agent in a privileged mode of operation, as set forth in independent claim 1.

For at least the aforementioned reasons, Applicants respectfully submit that the present invention is not anticipated by Beckert and request that the Examiner's rejections of claims 1-2, 5-11, and 14-15 under 35 U.S.C. 102(b) be withdrawn.

Moreover, it is respectfully submitted that the pending claims are not obvious in view of Beckert and Moore, either alone or in combination. To establish a *prima facie* case of obviousness, the prior art reference (or references when combined) must teach or suggest all the claim limitations. *In re Royka*, 490 F.2d 981, 180 U.S.P.Q. 580 (CCPA 1974). As discussed above, Beckert fails to describe or suggest many features of the present invention. Moreover, Beckert fails to provide any suggestion or motivation to modify the prior art to arrive at Applicants claimed invention. In fact, Beckert is concerned with a completely different problem, *i.e.*, determining whether an authorized or unauthorized user of a vehicle is attempting to operate the vehicle. The Examiner relies upon Moore to describe the use of hashes and digests. However, Moore fails to remedy the fundamental deficiencies of the primary reference.

For at least the aforementioned reasons, Applicants respectfully submit that the Examiner has failed to make a *prima facie* case that the present invention is obvious over Beckert and Moore, either alone or in combination. Applicants request that the Examiner's rejections of claims 3-4 and 12-13 under 35 U.S.C. 103(a) be withdrawn.

In the Office Action, claims 16-17, 20-21, 23-29, and 32-33 were rejected under 35 U.S.C. § 102(e) as allegedly being anticipated by Jain (U.S. Patent No. 6,367,018). Claims 18-19

and 31 were rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Jain in view of Moore. Claim 22 was rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Jain in view of Fleming, et al (U.S. Patent No. 6,212,360). Claim 30 was rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Jain in view of Moore and further in view of Labatte, et al (U.S. Patent No. 5,901,301). The Examiner's rejections are respectfully traversed.

Independent claim 16 sets forth a communications system that includes a physical layer hardware unit and a processing unit. The physical layer hardware unit is adapted to communicate data over a communications channel in accordance with assigned transmission parameters. The physical layer hardware unit is also adapted to receive an incoming signal over the communications channel and sample the incoming signal to generate a digital received signal. The processing unit is adapted to execute a modem driver in a standard mode of operation and an authentication agent in a privileged mode of operation. The standard mode driver includes program instructions adapted to extract control codes from the digital received signal and configure the physical layer hardware assigned transmission parameters based on the control codes. The authentication agent includes program instructions adapted to authenticate the modem driver. Claims 17-33 depend from claim 16.

Jain describes a network intermediate device 11 that includes authentication resources such as a direct link detection routine. The network intermediate device 11 may use the authentication routine with direct link detection to authenticate end stations 10, 12, 13, 14, 15. See Jain, col. 4, ll. 11-43 and Figure 1. However, Jain is completely silent with regard to standard and privileged modes of operation. Accordingly, Jain does not describe or suggest a

processing unit adapted to execute a modem driver in a standard mode of operation and an authentication agent in a privileged mode of operation.

For at least the aforementioned reasons, Applicants respectfully submit that the present invention is not anticipated by Jain and request that the Examiner's rejections of claims 16-17, 20-21, 23-29, and 32-33 under 35 U.S.C. 102(e) be withdrawn.

Moreover, it is respectfully submitted that the pending claims are not obvious in view of Jain, Moore, Fleming, and Labatte, either alone or in combination. As discussed above, the prior art reference (or references when combined) must teach or suggest all the claim limitations to establish a *prima facie* case of obviousness. Jain fails to teach or suggest a processing unit adapted to execute a modem driver in a standard mode of operation and an authentication agent in a privileged mode of operation, as set forth in independent claim 16. Jain is also completely silent with regard to privileged modes of operation and therefore provides no suggestion or motivation to modify the prior art to arrive at Applicants claimed invention. The Examiner relies upon Moore to describe the use of hashes and digests, Fleming to describe various control codes, and Labatte to describe storing a key in a BIOS. However, none of the secondary references remedy the fundamental deficiencies of the primary reference.

For at least the aforementioned reasons, Applicants respectfully submit that the Examiner has failed to make a *prima facie* case that the present invention is obvious over Jain, Moore, Fleming, and Labatte, either alone or in combination. Applicants request that the Examiner's rejections of claims 18-19, 22, and 30-31 under 35 U.S.C. 103(a) be withdrawn.

In the Office Action, claims 34-41 were rejected under 35 U.S.C. § 102(b) as allegedly being anticipated by Scherf (U.S. Patent No. 5,390,301). The Examiner's rejections are respectfully traversed.

Independent claim 34 sets forth a method for identifying security violations in a computer system. The method includes executing a driver in a standard processing mode of a processing unit, transitioning the processing unit into a privileged processing mode, and authenticating the driver in the privileged processing mode. Claims 35-41 depend from claim 34.

Scherf describes a technique in which drivers in a system allocated one data structure for each peripheral controlled by the driver. The drivers may then fill the data structures with information reflecting features and/or limitations of the attached devices. See Scherf, col. 4, ll. 1-5. If the device is a block device, the driver may insert the pointer to the driver's block hashing function in a block input/output hash function table. If the device is a character device, the driver may insert a pointer to the driver's character hashing function in a character input/output hash function table. See Scherf, col. 5, ll. 9-38.

However, Scherf is completely silent with regard to any particular operating modes of the system. Scherf is completely size with regard to a system that may operate in a standard mode of operation and a privileged mode of operation. Scherf therefore fails to teach or suggest executing a driver in a standard processing mode of a processing unit and transitioning the processing unit into a privileged processing mode, as set forth in claim 34. Scherf also fails to describe or suggest authenticating the driver in the privileged processing mode, as set forth in claim 34.

For at least the aforementioned reasons, Applicants respectfully submit that the present invention is not anticipated by Scherf and request that the Examiner's rejections of claims 34-41 under 35 U.S.C. 102(b) be withdrawn.

For the aforementioned reasons, it is respectfully submitted that all claims pending in the present application are in condition for allowance. The Examiner is invited to contact the

undersigned at (713) 934-4052 with any questions, comments or suggestions relating to the referenced patent application.

Respectfully submitted,

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